

OLDEST BEE PAPER
IN AMERICA

THE AMERICAN BEE JOURNAL

DEVOTED EXCLUSIVELY TO PROGRESSIVE BEE CULTURE.

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TOPICS PRESENTED THIS WEEK.

Editorial—

Editorial Items.....	753
Another New Book on Bees.....	753
Throw Away the Old Honey Boxes.....	753
Glucose Factory Failures.....	754
The Chicago Bee Convention.....	754
Cost of Getting Those Statistics.....	755
International Exhibition at Hamburg.....	755
Very Crooked.....	756
Honey and Beeswax Market.....	763

Among Our Exchanges—

Bees in China.....	756
Beversible.....	756
Effects of Conventions and Honey Shows.....	756
Whence Cometh Many Diseases?.....	756
A \$20 Biblical Reward.....	756

Correspondence—

Our Railroad Apairy Car and Track.....	757
How I Make Nuclei and Queen Cells.....	757
Boil It Down.....	758
Different Kinds of Bee-Keepers.....	758
Duties of Bee-Keepers in the Spring.....	759
New Plan for Introducing Queens, etc.....	759

Convention Notes—

Local Convention Directory.....	760
Convention Notices.....	760
Maine Bee-Keepers' Association.....	761
Iowa Central Convention.....	761
How to Cure Foul Brood.....	761

Selections from Our Letter Box—

Report for 1882.....	762
A Natural Bee Hive.....	762
4,000 Pounds of Honey from 19 Colonies.....	762
Ready For Winter.....	762
Care of Empty Combs.....	762
My Season's Work.....	762
Sensible Bees.....	762
Wintering Bees.....	762
Report for the Past Season.....	763
My Bee Report.....	763
Causes of Foul Brood.....	763
Questions.....	763
A Humbug or Swindler, Which.....	763



Another New Bee Book.

We have received the prospectus of a new book by Henry Alley, Wenham, Mass., entitled "Twenty-two Years Experience in Rearing Queen Bees." Mr. Alley says, "this work is intended to teach the best, easiest, most scientific and practical method for rearing queens." The price will be \$1.00. The author, in his prospectus, remarks as follows:

For twenty-two years I have made the business of rearing queen-bees my sole occupation, and during that time have probably reared more queens than any other man in the world. I have experimented largely in queen-rearing, when, about four years ago, I discovered a new method of building queen cells, that does not take one-half the time, labor, trouble or expense required by the old process. By this method I rear just as many or few queens as I put eggs into a hive, and in the exact locality in which I desire them built. The cells are all large, and so evenly spaced apart, that each one can be cut out without injury to its neighbor cell. The queens produced are as large, hardy, long-lived and prolific, as any reared under the swarming impulse. The cells are all built in full colonies, which are queenless only four days, consequently always have a large proportion of young bees. The time of hatching of a given lot of cells can be determined within an hour of each other, as they are never from one to three days apart in hatching out, as by the old process.

By my method at least as much honey can be produced by use of the extractor, as though the colony was not engaged in cell building. My method is entirely new, and has never been published; only three persons besides myself have any knowledge of it, and they (all old bee-keepers) assure me that I have reduced the matter of queen-breeding to a perfect science. I propose to publish my method, in

book form, and at the same time give many of the valuable ideas gained by me during my long experience in this branch of apiculture, and that have never before been made public. As this work will require an outlay of from \$150 to \$200 for engravings, etc., to illustrate my method, I propose to charge a fair price for it.

We can fill orders for this work as soon as published, which will be duly announced in the BEE JOURNAL.

Throw Away the Old Honey Boxes.

—A bee-keeper came to Chicago last week to sell his honey. In order to save a lot of six-pound boxes he had on hand, he used them, and consequently depreciated his honey 5 cents per pound. He said, most emphatically, as he was leaving the BEE JOURNAL office: "It would have paid me much better to have burned up the old boxes and bought new sections." It certainly would have paid him better, and been much more satisfactory to all concerned to have done so. Let all who may have any old large boxes on hand bear this transaction in mind.

—We have received a copy of Mr. G. M. Doolittle's Club List of Papers for 1883. It consists of 12 pages besides the cover, and is very neatly printed. Those who want to subscribe for several publications should send for it. They will find much in it to interest them. His address is Bordonino, N. Y.

—We intend to be present at the Michigan State Convention, at Kalamazoo, on Dec. 6, 1882, and hope there will be a good attendance.

—Many bee-keepers have done well during the past season, and should be feeling quite happy. Now it will be in order to prepare for the next season's work by procuring your hives and sections in proper time for use.

Glucose Factory Failures.

In these factories more than a million dollars are locked up. As the price of corn is high and the production of glucose is in excess of the demand there is a proposition on foot to consolidate the factories, and thus prevent competition, so as to make the product pay. A meeting was called at Davenport, Iowa, and the proposition for consolidation was well considered, for there was a session of three or four hours, and at last it was referred to the Board of Directors with power to act.

Of course there are several glucose manufacturers which are failures, so greatly encumbered that they are not worth the amounts loaned on them—and these will not be accepted in the consolidation, although the creditors are making frantic efforts for admission into the scheme.

The Davenport *Democrat*, in giving an account of a recent meeting of the stockholders of the Davenport Glucose Works, states that the business has reached a peculiar crisis. Because the glucose works at Buffalo, New York, proved profitable, a multitude of glucose companies were organized in the West and hundreds of thousands of capital were put into buildings and machinery, and now the proprietors of these factories, with only three or four exceptions, are dissatisfied with their experiments, which have proven losing investments. There are thirteen in number in the West, besides the works in Peoria and Leavenworth, which are owned by the Hamlin's, of Buffalo, N. Y. The Davenport *Democrat* gives the following statement of the present condition of the several companies named:

Davenport works—capacity, 3,000 to 3,500 bushels of corn per day, shut down two weeks ago, that the present proposition might be considered: will resume operations in thirty days, whether the consolidation is affected or not.

The Des Moines, Iowa, and Sagerton, Illinois, works have proved failures, sinking all the capital invested.

Marshalltown, Iowa, works, after having used up \$250,000 capital, are being enlarged from 1,500 to 3,000 bushel capacity for profitable working! The stockholders have never received a cent of dividend.

Rockford, Ill., capacity 1,500 bushels per day—heavily encumbered and idle.

Geneva, Ill., capacity 800 bushels per day. Idle—failure.

Freeport, Ill., capacity 3,000 bushels per day. Idle, with 7,000 barrels of syrup on hand. Resumption of operations improbable.

Iowa City, Iowa, capacity 1,500 bushels per day. Shut down because of dull trade. Profitless so far.

St. Louis, Mo., capacity 2,000 bushels per day—idle.

St. Joseph, Mo., capacity 1,000 bushels per day—working occasionally as there may be demand.

Danville, Ill., capacity 3,000 bushels per day—shut down because of dull trade.

Tippecanoe, Ohio, closed for repairs. The only really successful works in the West, outside of those owned by the Hamlin's, and the Davenport works.

Peoria, Ill., capacity 3,000 bushels per day—idle.

The factories of the Hamlin's—two in Buffalo, one in Peoria, and one in Leavenworth, having an aggregate of 20,000 bushels per day—are in operation, but selling the product at a very unremunerative price.

The Firmerick works, in Buffalo, are refining works—for the purpose of making sugar out of corn starch for mixing with real sugars for table use, use 6,000 to 8,000 bushels of corn daily. The great works being built in Chicago, capacity 15,000 bushels daily, contemplate the same business.

There are big works near New York—owned by Duryea and Booth & Edgar—having an aggregate capacity of 10,000 bushels daily, in operation. Will not enter consolidation, but make combination with the consolidated companies.

The works at Kansas City, Mo., and Wheeling, W. Va., were built for refining by the dry process. They absorbed \$100,000 each, and are dead failures.

Detroit works, capacity 3,000 bushels daily—are idle.

The above is the results of the rush of many men to get rich, even if they had to sell their manhood to do it. We are heartily glad that corn is too high in price to allow its conversion into such a fraud as glucose.

The Chicago Bee Convention.

We have already remarked that we thought the late convention of bee-keepers in Chicago was the best we ever attended, and added that, the enthusiasm being so great, those in attendance wanted to meet at 8 o'clock in the morning, and held that session until about 1 o'clock in the afternoon. In the last *Juvenile Gleanings*, Mrs. L. Harrison likens conventions of bee-keepers to schools, and the presidents to schoolmasters, and adds:

I have always thought that bee-keepers ought to take their wives and children with them to the bee meetings, and have a good time as well as themselves; but I am really glad that you were not at the Northwestern, that was lately held at Chicago. Why, the master wanted to hold a session from eight in the morning until one in the afternoon, and not give us a bit of a recess; and he would not let us

whisper a bit. I did, though, just once; I only asked his wife how many children she had, and down came his stick with a whack that made me jump. I wanted so much to ask her if she liked to make beeswax, but I didn't dare to after that. He called me horrid, too; I don't believe in whispering in school, and I would not have done it had he given a recess to do my talking in.

Mrs. Harrison then made the following suggestions about the management of such meetings. She evidently looks to the rising generation for reform, and adds:

When you boys and girls have a convention, and have talked about black, brown and yellow bees for one hour, throw open the windows to let in fresh air, make on a fresh fire, stand up and sing a bee song, or the doxology, or have an old-fashioned recess, and play leap-frog, or anything you like; after recess you can keep still, listen, or talk at pleasure.

This is a thought well worthy of consideration. We often get weary, and know that a rest, a song, or a recess would be very agreeable and refreshing, and we will now promise that at the next convention we will have some songs ready to intersperse in the meetings, such as "The Bees Among the Clover," "Charlie, the Bees are Swarming," etc., and, if the president does not object, we will have a lively time. We really think he will be glad not only to permit it, but to help do the singing, for he is a musician, and, if we do not mistake, the leader of a quartette or church choir.

President Miller's son, 14 years of age, sends the following statistics to *Gleanings*, showing "some of the results of wintering reported by 50 bee-keepers at the Chicago convention."

HOW WINTERED.	Number of colonies		Number lost in winter.		Per cent. lost in spring.		Per cent. lost in spring and autumn.	
	last fall.	in winter.	Number lost in winter.	Per cent. lost in winter.	Number lost in spring.	Per cent. lost in spring.	Number lost in winter and spring.	Per cent. lost in winter and spring.
Chaff hive.....	136	1	.7	.7	1	.7	1	1.5
Packed in hay.....	37	0	0	0	2	5.4	2	2.7
Bee-house.....	203	4	2	1	52	25.5	47	4.5
Cellar.....	1671	26	1.6	52	31	18.7	31	18.7
Chaff packing.....	1186	52	4.4	14	1.2	5.6	1.2	5.6
Out unpacked.....	18	1	5.6	0	0	0	0	0
Chaff and cellar.....	76	1	1.3	5	6.6	7.9	6.6	7.9
In a cave.....	12	0	0	0	1	8.3	8.3	8.3
Total.....	3339	85	2.5	79	24	4.9	24	4.9

Mr. Root remarks that "the report shows well for chaff hives, but not quite so well for chaff packing as for cellar wintering." And President Miller says: "We had a good, solid, working convention at Chicago; more honey being represented than at Cincinnati."

Cost of Getting Those Statistics.

In reference to this very important subject we have received the following letter:

I am much interested in the honey statistics of the country, so much so that I worked up this county at my own expense ; the account of which has been published in the BEE JOURNAL and credited to J. S. Terrill, by mistake of the Secretary of the Convention, at Cincinnati, O. Now, I have a plan which I have been thinking about, that would cut down your \$4,000 some, if it could be made to work. There are a great many bee-keepers in the country who are fourth-class postmasters (I happen to be one of the unlucky class), whose salary is made up of from 60 per cent. of the amount of stamps canceled ; on the first \$100 each quarter ; 50 per cent. of the second \$100, and so on. Now, the most of these postmasters cancel less than \$100 each quarter, so you see they get 60 per cent. of all the stamps canceled. My idea is to get these bee-keeping postmasters interested in these statistics, let them work up their own counties, and donate the per cent. of cancellation at their office to the statistical fund ; also, ask each bee-keeper to donate a few cents to carry on the work. What enterprising bee-keeper is there who would not give a few pennies to know the amount of bees and honey raised in the country. It cost me ten times that amount to get the statistics of one county, and yet I feel paid for the cost and trouble, and if each bee-keeper that I corresponded with had sent me a three cent stamp (which I think they would have done if I had asked it), it would have covered the whole expense.

There might be counties where you could not find a P. M. to do the work ; then let one man work two or more counties. This is a small job if you will use a copying pad, for with once writing you take 75 legible copies ; these pass through the mails for one cent, thereby cutting down the postage two-thirds, and the letter writing to a mere shadow. I am confident that these plans will work with a trifling expense, and if you will authorize me, I will try one county at my own expense. I would prefer a county joining Lorain. Now, from these suggestions, perhaps some one can suggest something better. But don't let that \$4,000 scare us out of the work which is necessary in the interests of the bee fraternity.

O. J. TERRELL.

North Ridgeville, O., Nov. 17, 1882.

There may be some postmasters who would be willing to aid the work of obtaining statistics in the way Mr. Terrill mentions,—but, we fear, they would be very few in number, not over one in a thousand !

We did not mention the amount necessary to defray the expense and postage, in order to "scare" any one "out of the work," but to have its magnitude fully understood.

We only calculated on one-cent postage each way, but there are 45,000 post offices in the United States. To get a circular to each one with a return postal card will cost over \$1,000. Then there will be an average of say 3 bee-keepers to each post office ; to get a circular and postal card to each of these will cost over \$3,000 more ; or over \$4,000 in all. It is very generous in him to offer to get the statistics of another county ; who else will volunteer to get the statistics of a county, if we will undertake to furnish blanks for each county, to be filled up and returned to us to tabulated ? We may get this started yet.

Since writing the above we have received the following letter from Mr. Hackman, which will fully explain itself :

DEAR EDITOR:—You are correct on the expenses regarding the statistics of bee-keepers, but why not get the statistics of live bee men : that is, of those who read bee periodicals ? They could be easily reached by simply making a call through the different bee publications ? It seems to be of very little use or consequence, as far as it regards the box-hive and log-gum bee men ; their product will never affect the market much. Let us have the statistics of progressive and systematic bee men, and I, for one, would be much pleased. We have but 3 of such bee men in this locality. If there is a call made, according to my idea as stated above, I will do all I can to get information. We have a few box-hive men around here, but their goods are generally in such a condition that they will never affect the market much.

H. S. HACKMAN.

Peru, Ill., Nov. 17, 1882.

In order to make a table, showing the honey production of America, that will be of any value, it must include all the honey produced, no matter whether it be obtained by progressive bee-keepers or not. It is very kind of Mr. Hackman to promise to do all he can—but if it is not to be a thorough and complete statistical table, it will be better not to undertake it at all. It should be organized at the start so completely that it cannot fail to overcome every obstacle which can be thrown in the way. The funds must all be provided in advance, for there will be enough work in the legitimate performance of their duties to occupy the entire energies of the committee, without looking after such trifles as the money to pay postage and expenses, etc.

Until that is done we can do no more than to discuss the plans proposed, in the hope of finding one that will reduce the expenses to the minimum.

Last year we tried the plan suggested by Mr. Hackman, of calling for reports of the progressive bee-men who read bee-periodicals, and our experience is that but few will take the trouble to report, and such are always those who have been most successful, consequently the Tabulated Statistical Table we published last October was assailed by some who did not report, and, by perversion and malicious misrepresentation, attempted to make it look ridiculous ; as may be seen in extracts from some of these impulsive correspondents, as quoted in the BEE JOURNAL for Dec. 14, 1881, and Jan. 11, 1882. Several other attacks were made upon us and that Table, which we deemed too malicious to answer.

International Exhibition at Hamburg.

Some months since we mentioned the fact that there would be an "International Exhibition of Animals connected with Agriculture," at Hamburg, Germany, from July 3 to 11, 1883. This Exhibition includes implements, machinery, literature, etc., connected with each department ; the fifth being "Bees ; appliances for the keeping and culture of bees, and products of the same." Now we desire to announce that we have a number of programmes, giving specific directions for exhibitors, etc., and will send these to any one applying for them, who may contemplate sending an exhibit.

We were requested by the Provisional Committee to take charge of the American exhibits in the fifth class, (see page 306), and Richard Gottel & Co., Export Commission Merchants, 202 Walnut St., Philadelphia, Pa., have consented to forward exhibits to Michaelis & Hoffmann, at Hamburg, who will take charge of exhibits and sell them, if requested, and return the proceeds to the owners of the articles exhibited, at a moderate percentage.

This Exhibition will be one of great magnitude. Much interest in it is already manifested throughout the world ; it is, therefore, advisable that those who wish to exhibit should secure the proper space as early as possible. The Hamburg commission firm wishes to be informed of any one desiring to secure space, and will obtain it for exhibitors in America.

They will also supply all necessary information concerning the Exhibition and its management, together with circulars and other papers referring to it.



MISCELLANEOUS.

Bees in China.—Mr. O. W. Willits, writes a letter from Pekin, China, to the *Juvenile Gleanings*, concerning the only colony of bees he had seen during a residence of three years in China, and the bee pasture he found there. He thus describes the bees and the place where he found them, etc.:

I have hurried out to examine more closely the only hive of bees it has been my fortune to see in China during a residence of three summers. This is in a hollow tree in the rear of the pagoda of a large Buddhist temple. The bees are not so large as our common bees, nor do they seem as much inclined to sting, though some Chinamen were stung the other day by a few who had been disturbed in their work of building a new home. The entrance to this tree is just above the ground. The bees are so thick about it that I cannot determine where the hole begins, though it ends about fourteen inches above the earth. I should think there were bees enough for several ordinary hives; in places they are five or six layers deep. I wonder if they are going to swarm. They are of a general brownish hue, but have three broad bright-yellow bands. I wish I had more courage, and I would go up and get one. How I should like to get into that old tree!

While I have been writing, my little girl, with two playmates, has been wading in a lotus pond. I wonder if I can describe the lotus flower so that your boys and girls will get a correct idea of how it looks. It grows out of the water much like the water-lily, but doesn't stop growing so soon; for the stalk, which becomes half an inch or more in diameter, stretches up from three to five feet above the water. One solitary leaf forms at the top. The leaf, in front of me, and there are larger ones in the pond, measures eighteen inches in diameter. It is of coarse texture, almost round, and has some twenty or twenty-one strongly marked veins radiating from the center. It resembles a green umbrella which the wind has turned inside out.

On a similar stalk, but not on one bearing a leaf, there forms the largest and most beautiful flower I ever saw. It reminds one much of the peony, though it has not so many petals, and is on a much grander scale. These before me are pink, though there are also red and white ones. Within these beautiful petals stands up the seed-pod. It is shaped somewhat like a cucumber cut crosswise. The seeds are arranged in a circular form, and set in like cartridges in a repeating rifle, which they also resemble in other respects. These seeds, when ripe, are eaten with a relish. The root, also, is a salable article of diet, much

desired, and bringing a good price. A slice of it looks like a slice of raw potato after a boy has filled his pop-gun as many time as possible without breaking the partitions. It has a pleasant, sweetish taste, and is prepared for food in many ways. The Emperor has a lake of lotus-flowers. After not many days, hundreds of men will find employment in gathering the succulent roots.

Reversible.—The *Scientific American* in a late issue, mentions the following:

An improved honey extractor has been patented, consisting of a series of comb holders resting on a plate or frame loosely mounted on a vertical shaft in a vessel, the comb holders having pivots or pintles projecting from the bottoms, on which pintles pinions are mounted, which engage with a cog wheel rigidly mounted on the shaft below the loosely mounted plate, this cog wheel being provided on its upper surface with a series of notches, and the plate or frame being provided on its under side with a pawl strip adapted to catch on the notches, so that the honey will be thrown from the combs by the centrifugal force when the shaft is rotated, and when the motion of the shaft is slackened the comb holders will be reversed. The comb holders can thus be reversed very rapidly and easily by simply retarding the motion of the cog wheel by holding back on the crank.

Effects of Conventions and Honey Shows.—The *American Agriculturist* for December is received, and under the heading of "Bee Notes for December," we find the following, on the beneficial effect of Conventions and Bee and Honey Shows, which the BEE JOURNAL has persistently advocated for many years:

A leading cause for the recent rapid progress in Apiculture, is to be found in our numerous Conventions. These County, District, State, Inter-state, and National meetings, to consider, and discuss important questions, are now numbered by hundreds, and are lending a powerful influence to develop practical apiculture. The most influential of all these societies is the North American Association. This gathers the "meat" from all the lesser associations and freely distributes it to the whole country. Reports were made at the recent Cincinnati meeting from nearly all the States of the honey yield for the past season. The records for the South and West were encouraging. The South especially has had a wonderful yield of the best honey. In the East, and north from Ohio, the yield has been unprecedentedly light. In Southern Ohio, and portions of New York and Canada, the report is of an entire failure. In California and the East the crop is poor. From these reports we gather three important facts. First, cold, no less than excessive drought or wet, will dry up the nectar glands, and blast the bee-keeper's hopes. Secondly, the Gulf States, especially Tex-

as, bid fair to rival California as honey producing regions. The winters are as safe, the honey season as long, and the seasons more sure. Thirdly, the South can furnish as fine honey as any section of the United States. Honey exhibited from Florida, Mississippi, and Texas, was greatly admired. From these reports, we also learn an important lesson: that to secure a certain harvest, bee-keepers must grow special honey plants. Then, if the white clover, or the basswood fail, we still have hope.

If rightly managed, it is impossible to clog the market even with extracted honey. Pure honey in every sales-room and factory, put up in the best style, will sell in almost unlimited quantity. Overstocking the market need no longer be feared.

Whence Cometh Many Diseases?—The *Grange Bulletin* remarks as follows on the danger of adulteration:

Remember that pure honey has no equal as a medical sweet and far exceeds that of ordinary or common sugar syrup (or glucose), which should at all times be used in preference to either of the two last named articles. Besides, let us ask, would it not be wise in us, as a people, to reflect and study from whence comes many of the ailments the human family seem to be heir to of late years, when we see so many cases of cancer that fasten upon the vitals of the human system.

A \$20.00 Biblical Reward.—The publishers of *Rutledge's Monthly* offer twelve valuable rewards in their *Monthly* for December, among which is the following:

We will give \$20.00 in gold to the person telling us how many verses there are in the New Testament Scriptures (not the New Revision) by December 10th, 1882. Should two or more correct answers be received, the reward will be divided. The money will be forwarded to the winner December 15th, 1882. Persons trying for the reward must send 20 cents in silver (no postage stamps taken) with their answer, for which they will receive the *Christmas Monthly*, in which the name and address of the winner of the reward and the correct answer will be published. This may be worth \$20.00 to you; cut it out. Address RUTLEDGE PUBLISHING COMPANY, Easton, Penna.

Very Crooked.—The crookedest of crooked work, and yet that which has grace and elegance in every crook, may be seen in the Noyes Dictionary Holders and Noyes Handy Tables. In them the fact is clearly demonstrated that if the inventor has not made the crooked straight, he has made the straight crooked, and thereby increased its beauty and utility. People in search of holiday presents will appreciate his success. A fine illustrated circular may be had *free* by addressing L. W. Noyes, 99 W. Monroe-st., Chicago. The prices have been greatly reduced.



For the American Bee Journal.

Our Railroad Apiary, Car and Track.

M. A. WILLIAMS.

DEAR EDITOR:—We enclose picture of our railroad apiary, showing our extracting car, etc. We have 140 colonies in this apiary and with the aid of our extracting car two men can take the honey from them in one day. At

6 feet wide, painted bright scarlet, and trimmed with white, and makes a very showy appearance; but the car is not for show, by any means. It has a double sash, one side being glass and the other wire cloth, so that we can have free ventilation through. Each side of the car is fitted up with two drawers that hold just ten Langstroth frames.

We start out with one drawer full of empty combs on each side. Pushing the drawer alongside of the hive, we take the full frames from the hive to the empty drawer and fill the hives right up with the combs from the other drawer. Then we are through with one colony, the time oc-

will be noticed that our friends run their honey right to the station on this same car, so that their honey is shipped without the need of a team at all. Now, by having other apiaries along the line of the main railroad, 10 or even 100 miles away, where there is found unusual pasturage, the car, with all its appurtenances, may be quickly and easily transported, and then, with suitable switches, the honey can be taken with little bother and expense. It rather seems to me now as if this were a more promising field to develop than the floating apiary that made such a sensation a few years ago."

Berkshire, N. Y.



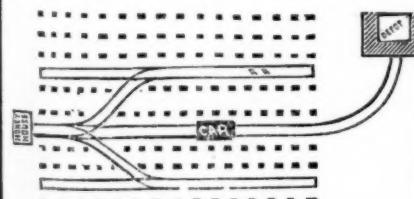
RAILROAD APIARY, EXTRACTING CAR AND TRACK.

the end of the center track is our honey house, fitted up with tanks, where we empty the honey as fast as we get a load. You will see that each side of the car is fitted with drawers,

cupied being incredibly short. Then we are ready for No. 2, and the combs from No. 1, when extracted, go into the hive of No. 2. Of course, the honey is being extracted inside the car at the same time. The drawers are so arranged that the car is bee-tight when they are either open or shut.

Figure 2 shows our track and how we switch from one track to another. There is one movable length of track that easily moves from the main track to the switch, on either side. The sketch rather shortens the yard, as the distance from the maple tree to the honey house is greater than the breadth. The two rows on the left are chaff hives, and the rest of them are the Langstroth. The sketch shows how we are located as to the depot, railroad, etc.

Mr. Root makes the following remarks about the use of the car: "It



TRACK AND SWITCHES.

one for full combs and the other for empty ones.

The extracting car and track we have already described, as follows, in *Gleanings*: The car is 12 feet long by

For the American Bee Journal.
How I Make Nuclei and Queen Cells.

G. M. DOOLITTLE.

When I was writing my series of articles on the "Production, Care, and Sale of Comb Honey," I was requested by several persons to write an article on making nuclei, and getting queen cells for the same. Many ways of making nuclei have been described, some of which are good; still after trying nearly all the plans described in the bee publications, I have settled on one which I prefer to all others.

Nearly all are aware that if we take a frame of brood, bees and honey, from a populous colony and put it in an empty hive without a queen, that nearly all the bees will return to their former home; but if we take the

queen with them the majority of the bees will stay with her. This one point of so many bees returning to their old home, thereby causing the brood and queen-cell given to perish, is the great objection to most of the plans stated for making nuclei. As bees without a queen become attached to their queen-cells, to nearly the same extent they do to a queen, I reasoned that if a colony having queen-cells were divided into several parts (each part having a queen-cell), the bees would remain where they were put nearly as well as those would that had a queen. After several experiments in the matter I found the above reasoning to be correct.

Hence, to make my nuclei, I found out how many queen-cells the colony rearing cells contains, as soon as they are sealed over; and then I go to other hives and get as many frames of brood (having plenty of young bees hatching out) as I have sealed queen-cells, less those having queen-cells upon them, in the queen-rearing hive. These frames of hatching brood are placed in the hive with those having the cells; and if one hive is not large enough, a second story is added. Now leave them until 48 hours before the first queen is expected to hatch, when I transfer the queen-cells till each frame contains a cell. The next day these frames are placed one in a hive, thus making as many nuclei as there are frames, leaving one on the old stand, of course. Beside the frame of brood, bees, and queen-cell, I place a frame of honey, and then shut them up close to one side of the hive, by means of a division board. If I wish to be sure that none of the bees will go back, I shut the entrance and hive tight, for 36 hours, thus confining the bees till the young queen is hatched. Open the hive first at night and you will find, upon examination a day or two afterward, that you have a splendid nucleus in good working order.

HOW I GET THE CELLS.

As I believe queens reared under the impulse of natural swarming are superior to those reared in queenless colonies, most of the cells for my queens are built by colonies preparing to swarm. As soon as the first cell is sealed, the first swarm issues as a rule, a part of which swarm, with the queen, is hived, and the rest returned, to keep the brood warm, which is to be placed therein for making nuclei as given above. If but few queen-cells are wanted, enough will generally be built without any interference of the bee-keeper, but as I desire as many as possible from my best colonies, I adopt this plan: In going through the yard spreading brood, etc., I find, a few weeks before swarming, rudimentary queen-cells, or queen-cups started. All these are carefully taken from the combs, and collected in a dish I have for the purpose. At the time I think my best colonies are preparing to swarm, I take a frame of old comb and cut it full of slots, about 1 inch wide, or else take a frame and nail four strips of wood across the inside of it, and by means of melted wax, stick strips of old comb to the under side of these

wooden strips. Now, take the embryo queen-cells, and with melted wax fasten them all along on this comb, or in the slots where it is to be set, in place of the center frame in one of the best colonies, which should be selected with care as to all the points required to give the best bees. By this means, a large number of superior queen-cells are secured (as the queen will lay in these cups) and so arranged as to be easily transferred. If from any cause I wish more queens than can be reared from my best colony in this way, I proceed as above till I get the queen-cups attached to the strips of comb, when I go to my best colony and get a piece of comb containing larvae just hatched. The cells to this piece of comb are shaved off near to the base, when the little larvae are easily lifted from the bottom of the cells, by means of a goose-quill tooth-pick, with a curved point, and placed in the queen-cups. Twenty-four hours previous to this, I have taken a queen from a populous colony, and at this time I take away all their brood, leaving the combs containing honey and pollen. If they have none, two or three such combs are given them. In half an hour they will show signs of distress by running over the hive and flying about in the air. Now give them the frame with the prepared cells (putting the larvae in the very last thing) and see what a hum of content they will set up as you leave the frame in the hive. In six hours these cells are supplied with plenty of royal jelly, and in about 12 days as large fine queens will be hatching as can be reared outside of natural swarming.

I see by the last number of the BEE JOURNAL that Mr. H. Alley has a plan whereby he gets his queen cells built in full colonies having a laying queen, and that these cells are built just when and where he wants them. This is something new, and if practical will be of great benefit to those desiring to rear queens. I understand through Mr. Pond, the writer of the article, that Mr. Alley is about to publish a book giving a full explanation of his process of getting queen cells, which will, without doubt, be quite an addition to the apicultural books already published. The above plans may not be as good as Mr. Alley's but I believe them as good as any yet given to the public.

Borodino, N. Y., Nov. 23, 1882.

"Boil it Down."

Whatever you have to say, my friend.
Whether witty or grave or gay,
Condense it as much as ever you can,
And say it the readiest way;
And whether you write of rural affairs,
Or of bees, or honey in town,
Just take a word of friendly advice—

Boil it down.

For if you go spluttering over a page
When a couple of lines would do,
Your honey is spread so much, you see
That the bread looks plainly through;
So, when you have a story to tell
And would like a little renown,
To make quite sure of your wish, my friend—
Boil it down.

Prairie Farmer.

Different Kinds of Bee-Keepers.

MRS. L. HARRISON.

Bee-keepers no longer hear the whistling notes of a swarm, or the happy hum of the bees, after a prosperous day, as they evaporate nectar; in lieu of this they love to hear the jingle of clean cash as the result of their labors. There are different kinds of bee-keepers, though; some do not keep bees for profit, as, for instance, the amateurs who rear them for love, or recreation, or to acquire knowledge of insect life. It is an ornament to a lawn to have a nice hive tenanted with beautiful Italians, to fertilize the fruit and to protect it when ripe, from marauding boys. There is yet another class who neither keep bees for profit nor pleasure, but apparently to damage others. This latter class are an intolerable pest. They keep bees in a hap-hazard way, and do not care whether they get much surplus, regarding the bees as a sort of nuisance, and let them spread disease and raise moths *ad libitum*. When they have, by a mere streak of good luck, some surplus honey to dispose of, they bring it to market in bad shape. Sometimes in sulphuring the bees they spoil the honey; sometimes they load in the hive, dead bees and all; or sell "chunk honey" in tubs and buckets; some a little better stored in rough boxes. A person does not find ready sale for this stuff, and as a last resort, puts it in a commission house, saying, "Sell it for whatever you can get."

When a person who keeps bees as a means of profit, comes to market with honey in nice shape, and demands a living price, he is hooted at by dealers who ask, "Do you think I will pay such an exorbitant price for honey?" The other day a commission merchant offered me honey at ten cents per pound, and some dark for as low as four cents." A case of this kind occurred not long since, and when the bee-keeper inquired in what shape it was, the dealer owned that it was not in good marketable condition. But he retaliated by saying, "If it was not in sections like yours, some of it was just as good and white, and would taste just as well when eaten."

It would be well for bee-keepers, if they would imitate commercial travelers more, and pack their grip-sack with samples only, when they are ready to dispose of their goods. In this way they can quickly visit consumers, groceries, drug stores and manufacturers, and receive a far different reception than they would if they had a wagon load at their doors. And if the bee-keeper needs anything in the line of those to whom he seeks to sell honey, so much the better. A mutual exchange benefits both. It is bad policy for bee-keepers to ship their honey to distant cities and towns, and leave their own locality unprovided for, thus forcing groceries and apothecaries to order these same goods from the cities to which they were sent. The best persons to sell extracted honey, owing to the many adulterations in this class

of goods, are its producers. The hue and cry about glucose in honey, benefits local bee-keepers, as those desiring pure honey purchase of those known to be its producers.

Peoria, Ill.

Translated from *Bienenfreund* by A. R. Kohnke.

Duties of Bee-Keepers in the Spring.

HERR HENNING.

As suggestions for spring work will be in order during the winter, I will attempt to give a few.

As soon as the weather becomes sufficiently warm to permit an examination of the colonies, the apiarist should do so, to ascertain if the bees have plenty of stores; and, if not, they should be fed abundantly, but very carefully, so as not to disturb the bees too much. Water for the bees should be put near the bees in a sheltered place. Queenless colonies should be re-queened, if they are strong enough; if not, they should be united with other weak colonies.

Re-queening, in early spring, should be done by furnishing such colony a fertile queen; never have them rear one themselves. Keep the bees warm. Contract the brood-nest and add frames, one every week or ten days; later in spring, when young bees begin to hatch, additional frames may be added more frequently, and stimulative feeding commenced. For the latter purpose I use the following composition: 1 pound of sugar, 3 ounces of water, $\frac{1}{2}$ ounce of starch, 7 grains albumen (dried), 7 grains phosphate of lime, 7 grains carbonate of lime, 7 grains salicylic acid.

Dissolve the sugar in the amount of water given, and boil to a thick syrup. Have the other ingredients very finely powdered and well mixed; add them, stirring continually, so as to well incorporate them in the solution of sugar. The sugar should be of the very best, not showing a bluish cast, which would indicate artificial coloring. The starch should also be pure—odorless and tasteless. All the ingredients can be obtained in a good drug store, with, perhaps, the exception of sugar. If you cannot get the albumen (white of eggs) there, you may prepare it yourself by spreading it thinly on window glass, and drying it in a warm temperature, not higher than 135° F. After it has thoroughly dried it may be scratched off, and by the aid of a druggist's mortar, converted into a fine powder.

After having stirred in all the ingredients, let it boil 3 or 4 minutes, pour it into frames which fit the hives, lay your frame on an even smooth board and see that no sugar runs out. In order to better prevent running, a piece of paper, larger than the frame should be pasted on the one side of the same, bending the edges and pasting them also to the different bars of the frame; then lay the frame on the board, with the paper next to it, and cast your cake.

After it has cooled it will stay in the frame and should be hung in the hive as near the brood-nest as convenient,

the paper on the off-side. If the colony has but little honey, two such frames should be given, one on each side of the brood-nest; but, if there is plenty of honey, one will be sufficient to enable the bees to raise brood and bees enough to crowd the hive when the honey season arrives; to accomplish this, such frames must be given from 4 to 6 weeks before the bees are wanted to gather the honey when the wave strikes your locality.

Erfurt, Germany.

For the American Bee Journal

New Plan for Introducing Queens, etc.

E. H. THURSTON, M. D.

The BEE JOURNAL is a regular and most welcome visitor; it make its appearance at my office every Wednesday almost as regular as the day itself, and is always filled with the most interesting and valuable information on apiculture of any publication I have ever read.

Allow me, Mr. Editor, to relate briefly a few experiments and give some thoughts on the introduction of queens. As I do not wish to consume much of your valuable space, I will touch lightly upon ventilation and wintering at present, but perhaps at some future time may give more upon these subjects. It has been said "Modern bee-keeping is very modern indeed," and it is well said; with so many practical and scientific investigators, how could it be otherwise?

My attention was attracted by an article in the BEE JOURNAL for Oct. 18, page 661, by Prof. S. J. Robbins, on the "Use of Onions when Uniting Bees."

A few days after reading the article I transferred a colony of bees from a box to a frame hive. I had a few bees with a queen in a Langstroth observatory hive; not caring to winter them alone, and wanting the combs for my new colony as well as the bees, I concluded to try the onions while uniting the bees.

I placed some onions in the observatory hive and in my new one; left them for 24 hours; I then removed the bees and combs and placed them in the new hive; there did not at the time appear to be any disturbance; they seemed to get along nicely, but on the next day I found my experiment had resulted in the death of all the bees from the observatory hive. I do not consider this a fair trial of the use of onions, and shall some time try it again.

Prof. R. spoke of using the onions for introducing queens, upon the theory of their changing the scent of the bees; this gave me a new idea. The thought occurred to me that if onion would do so well why would not some article having a stronger odor do better? Asafetida suggested itself; also a new method of introducing queens by the use of asafetida water, thrown on the queen and bees by a hand atomizer; the queen being let loose on the combs, among the bees; at the same time spraying among them quite thoroughly.

Here was a chance for experiment; and all that was lacking was the fact that I had no colony to put my queen in. My friend and neighbor S. N. Reagle, who by the way is one of our best and most successful bee-keepers, a man of much experience and a careful observer, and practical in every respect, informed me that he was in need of a queen for a queenless colony that had been queenless for two months. I made known to him my plan of introducing, and told him I would give him the queen if he would try the experiment, to which he readily assented.

I prepared the water by using half a drachm of tincture of asafetida to 2 ounces of water; gave him a hand atomizer and he proceeded as follows: he sprayed the bees in the hive through the entrance; the hive was then opened and the bees sprayed again; the queen in the cage was now sprayed and a center frame taken out, put up in a convenient place, the bees on it thoroughly sprayed and the queen turned loose among them; at the same time spraying the bees and queen lightly and watching her movements closely. He said she, as well as the bees, were considerably excited at first, but no attack was made upon her. After about five minutes the excitement passed off and they became quiet. He then sprayed the frame, bees, and also the bees in the hive and the frame was returned to the hive which was at once closed and remained so until the next day, when he opened it to see what the results had been. He found that all was peace and harmony; the queen had commenced laying and all hands were at work.

Mr. R. informed me that this colony had refused three queens, and that about three weeks before trying this experiment he had given them a frame of brood, that they had attempted to rear a queen, but as he thought, had failed; but about a week after introducing my queen, he found her all right, but, to his astonishment, he also found a small, runty queen, with no wings, in with her; and he is now satisfied that she was in the hive when he introduced my queen, and that she was there when he attempted to introduce the last one of the three before mentioned.

I do not claim anything wonderful for this method, nor do I know whether it is new or not, but I think it an experiment worth trying, and I would like to hear of some one else trying it.

Asafetida is somewhat of a disinfectant, and I think it would not be a bad plan to spray all colonies occasionally with the water.

I have consumed more space already than I had intended, but with your permission, Mr. Editor, I will add a few words touching ventilation and wintering.

The use of the enameled sheet I consider one of the very convenient things, but my impression was when I first saw it spoken of, that it would not permit the escape of the breath of the bees, and would retain too much of the animal heat; that the cold air on the outside would condense the heat, causing too much moisture in the hive.

To avoid this I punch the sheets full of small holes, for spring and fall use, and for winter I make an opening in the center of the cloth, 3x6 inches, cutting on one side and both ends of the opening and turning the flap back; over the opening I place a piece of wire cloth and then put on the chaff cushion, having first placed Hill's device, or something of the kind, over the frames under the sheet. This I think gives a thorough ventilation.

I was pleased to find in the October number of the BEE JOURNAL, page 659, the plans of Mr. James Heddon for wintering, as it was the plan I had determined on. I think the addition of lime to the sawdust would be of great benefit. I shall also add lime to my chaff cushions. I am of the opinion that if chloride of lime, camphor, and articles of a disinfectant and absorbent nature, were used in and around our hives, during winter and summer, that we would be troubled but little, if any, with cholera or foul brood.

I am more favorable to wintering out doors than in cellars, as I think it approaches nearer to nature. It gives the bees better ventilation as well as the advantage of a cleansing flight during favorable winter weather.

Hagerstown, Ind., Nov. 17, 1882.

CONVENTION NOTES

Local Convention Directory.

1882. Time and Place of Meeting.	
Nov. 29-30, Western Michigan, at Grand Rapids.	Wm. M. S. Dodge, Sec.
Dec. 6-7, Michigan State, at Kalamazoo.	T. F. Bingham, Sec., Abronia, Mich.
1883.	
Jan. 9.—Cortland Union, at Cortland, N. Y.	M. C. Bean, Sec., McGrawville, N. Y.
9.—Ohio State, at Columbus, Ohio.	D. Spear, Sec., Cardington, Ohio.
11, Nebraska State, at Wahoo, Neb.	Geo. M. Hawley, Sec.
16.—Eastern N. Y., at Albany, N. Y.	E. Quakenbush, Sec., Barnevile, N. Y.
16-18, Northeastern, at Syracuse, N. Y.	G. W. House, Fayetteville, N. Y.
19, 20.—Mahoning Valley, at Berlin Centre, O.	L. Carson, Pres.
Feb. 3.—Northern Ohio, at Norwalk, O.	
8.—Maine State, at Dexter.	Wm. Hoyt, Sec.
April 5.—Utah, at Salt Lake City.	E. Stevenson, Sec.
May 11.—Iowa Central, at Winterset.	J. E. Pryor, Sec.
—, —, Texas State Convention, at McKinney.	Dr. W. R. Howard, Sec.
Oct. 17, 18.—Northwestern, at Chicago, Ill.	Thomas G. Newman, Sec.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

The Ohio State Bee-Keepers' Association will meet in Columbus, in the rooms of the *Ohio State Journal*, on Tuesday and Wednesday, Jan. 9 and 10, 1883. A full attendance of members, and all interested in bee-culture, is requested, as matters of interest and importance will be discussed.

Dr. H. BESSE, Delaware, O., Pres.
DANIEL SPEAR, Cardington, O., Sec.

Maine Bee-Keepers' Association.

The regular quarterly meeting of the Maine Bee-Keepers' Association was held at Bangor, on Thursday, Nov. 9, 1882.

The President, Mr. F. O. Addition of Dexter, called the meeting to order, and Mr. Wm. Hoyt, the Secretary, read the report of the last meeting.

Several new members signed the constitution, among them a number of ladies; and it was noticeable that both during the forenoon and afternoon, there was a good sprinkling of ladies who were among the most interested participants in the convention. The Association now has a membership of about fifty, embracing the leading bee-keepers in all parts of the State.

After some discussion it was voted to hold the next annual meeting at Dexter, on Thursday, February 8, 1883.

It was a matter of much regret to all bee-keepers present at the convention, that Mr. R. S. Torrey, who had made all arrangements for the meeting, was prevented, through severe illness, from being in attendance.

In the afternoon, after disposing of some business, the following papers were read in the order named: "On Wintering Bees," by R. S. Torrey, Bangor; "Bee-Keeping, Past, Present and Prospective," by Lucian French, Dexter; "Wintering and Springing Bees," by O. L. Sawyer, Gardiner; "Bee-Keeping for Ladies," by I. F. Plummer, Augusta. In the absence of Mr. Torrey his essay was read by Mrs. Torrey, herself a most thorough and accomplished person in the science of bee-keeping.

WINTERING BEES.

Mr. French said that the first requisite to successful wintering was a strong colony, not less than three quarts, to give an adequate idea of quantity. Then some protection must be given, the amount depending upon the degree of cold the bees have to withstand. Next is a young and prolific queen. Then it is sure the colony must have plenty of stores. He believed that from twelve to fifteen pounds of honey were sufficient on which to winter a colony. Mr. French detailed at some length, but in an interesting manner, his various ways of wintering bees, and gave an account of some experiments in wintering which he intends to try the coming winter. He has had success in wintering hives on their summer stands by providing them with an outer box of rough boards, which left from six inches to a foot of room between that and the hive that was filled with chaff. One foot of chaff packing was also put on top of the hive. A report on some eight or ten different ways of wintering which he intends to try in his apiary of about forty colonies, he hopes to present to the Association at its next summer meeting. He is sure that more depends upon the vitality of the colony than any other one thing; and that the thing most to be dreaded is spring dwindling. Human wisdom has not yet devised the best way of wintering bees, but Mr. French lives

in hopes that it will soon be accomplished.

Mr. Plummer made some interesting remarks on wintering, and on providing artificial pasture for bees. As to the former subject, he said that in different years, and in different places, bees had sometimes wintered well in all kinds of situations. He thought one of the most difficult features of wintering was to carry the bees through from the middle of March to the middle of May, successfully. In regard to the latter he advocated with much earnestness the providing of artificial feeding ground, as without it, in the older portions of the State he thought we could not get so much honey from bees as was desirable. In some years, probably, owing to atmospheric influences, white clover will yield little or no honey. He thought highly of sweet clover and borage, with the latter being especially well pleased. The question with him was, as to whether we should grow crops for honey alone, or grow such crops as would yield grain after the honey had been gathered. He was going to sow half an acre of sweet clover another spring. As to borage, he had had a small piece the past season, which was in bloom perpetually from July 1st to very late in the fall, and the plants had been fairly black with bees from morning till night. From considerable experience he had but a slight opinion of buckwheat as a honey plant.

Secretary Hoyt said he had wintered one colony very successfully last winter by covering it "head and ears" with buckwheat straw, on its summer stand—the straw being piled on pretty thick. On April 5th last, he opened one side, and after getting into the straw a few inches found it perfectly dry. There was no loss to this colony, and it did not eat but little honey, as the top of the frames had sealed honey on them. The colony was strong, one of his best. He was intending to try half a dozen hives this winter in the same way—it was at least a cheap means of wintering. He thought if bees could be kept perfectly dormant in winter, in whatever location they were, and could be in a normal condition in the fall (*i. e.*, young bees) they would winter well; and should not raise brood or pollen till in the best possible condition to breed for summer say the last of May or the first of June. He knew of a friend had wintered bees in square boxes on the south side of a bank where the snow had drifted completely over them, and where they did not thaw out for the winter. They came out in as good condition as others kept in a different way. If bees are strong, they can fly toward spring, or even in winter, if the sun is warm, alight on the snow and rise again before becoming cold.

BEE PASTURAGE.

In regard to pasture for bees. Mr. Hoyt thought it a subject of much importance, but said he believed we could not afford to grow a crop for honey alone, as a general thing. He believed we should grow white, and the small Western red clover for this purpose. He had sowed borage to

some extent. It was a plant that was in flower from July 15th to the 2d of September, and when in flower was fairly black with bees feeding upon it from early till late, every fair day. They would leave goldenrod and buckwheat to work upon it. Mr. Hoyt, in speaking of the value of pasturage, remarked that he had one colony that gathered twenty-five pounds of honey in a single week on bass. If such pasturage as a bass forest afforded could be continued through the season, what stores our colonies would gather! In regard to buckwheat he had sowed it for six years, and thought it had paid almost every year, as he usually raised twenty bushels per acre.

Mr. French gave some of his ideas on bee pasturage. He has provided sweet clover, borage, buckwheat, Simpson's honey plant, and the spider plant, at different times, but did not think much of the spider plant, as he found his bees did not work upon it. He should try it one season more and if the bees did not work on it to a greater extent than formerly, should discard it. The bees worked on borage all the day long. He thought they worked but very little on red clover.

Brief remarks were made by Mr. J. E. Bennoch of Orono; Mr. Sampson of Oldtown; Mr. Wilmont, a California bee-keeper who was present, and other gentlemen, after which the convention adjourned.—*Home Farm.*

Iowa Central Convention.

The Iowa Central Bee-Keepers' Association met at Winterset, on Friday, Nov. 3, 1882, and was called to order at 10:30 a. m. with Pres. A. J. Adkison in the chair.

No report of the last meeting read, the minutes having been lost.

The following officers were elected for the ensuing year: President, A. J. Adkison, Winterset; Vice President, J. W. Graham, Winterset; Secretary, J. E. Pryor, Arbor Hill; Treasurer, Mrs. Mary Pryor, Arbor Hill, Iowa.

From 94 colonies of bees at the beginning of the honey season of 1882, there was reported an increase of 135 colonies, and a production of 1,943 pounds of comb honey, 6,980 pounds of extracted honey, and 48 pounds of wax. Of the 232 colonies reported at the close of 1882, there were 94 Italians, 127 Hybrids, and 11 Blacks. Kinds of hives used: 150 Langstroth, 50 North Star, 8 box hives, and 2 American.

This is hardly a fair representation of the bee-keepers within the bounds of the Association, several of the principal apiaries not being reported.

After receiving several new members and discussing methods of wintering, etc., the meeting adjourned to meet in the council room in the Court House at Winterset, on Friday, May 11, 1883.

J. E. PRYOR, Sec.

The annual meeting of the Cortland Union Bee-keepers' Association will be held in Cortland, N. Y., on Tuesday, Jan. 9, 1883.

M. C. BEAN, Sec., McGrawville, N. Y.

Read before the N. A. B. K. S.

How to Cure Foul Brood.

D. A. JONES.

This is a subject on which much has been said and written; and there seems to be a great many and varied ways of curing it; some of them, however, are rather difficult, and not within the reach of every bee-keeper, as well as being slightly costly.

I purpose setting forth in the following the most easy and cheap, as well as the surest method that has yet come under my notice, and one that comes within the reach of every apiarist on however large or small a scale. This mode of procedure (by starving) has never yet failed when properly carried out, and I have tried it in many cases in our country.

I shall give the process, first where there is no brood or where one does not care to save it; and secondly, where there is brood in the hive, and one is desirous of saving it. First, smoke and drum the bees until they have all gorged themselves with honey; and it is important that they be all well filled, otherwise that portion of them whose sacs are not full will not live the time that the other portion would be required to starve, to affect the cure; hence the necessity of having their sacs filled evenly. They should not be allowed to settle down again after having gorged themselves; the operations when once commenced should be carried through without the loss of any time, as a short space only would require to elapse, if left quiet, before some of them would replace their honey in the cells again, when the work of smoking, etc., would have to be repeated. After they have been smoked and drummed sufficiently, shake the bees into a clean hive or box, over which place a wire-cloth cover, care being taken that none escape, as one bee escaping and entering another hive would, in all probability, spread the disease, as it is by the depositing of the diseased honey in the cells of clean colonies that this disease is generally contracted.

To prevent the spreading of the disease, the operations should be performed either early in the morning or late in the evening, when no bees are flying; or if the work is done during the day, it should be beneath a wire tent, or in some other place of confinement, where there is no chance of any of the bees from the affected colony escaping. These precautions are required only where a portion of the yard is diseased; but where the whole apiary is attacked, the work may be carried on with impunity.

When all the bees have been secured in the hive or box covered by the wire cloth, carry it to a cool, dark place, and there lay it on its side; and why? First, because when in a dark, cool place the bees will cluster and remain more quiet than when subjected to light and heat; and secondly, when clustering in the top of the hive; and were the hive or box to be placed on its proper bottom they would all cluster on the wire cloth, and thus prevent

a proper ventilation, which would cause suffocation; whereas, by placing the hive or box on its side, the other side would then become the top; and on this the bees would cluster, thus securing a free circulation of air. The temperature of the place where the starving takes place should be from 50° to 55°, never above 60°, and a cellar would therefore be the best place in hot weather. They should then be left alone, perfectly quiet, from 80 to 120 hours, or until the bees are noticed crawling around the bottom of the box or hive in a starving condition, and a few of them are dead; then put them in a clean hive with clean comb or foundation; if comb, there should be honey in it, and if there is not, the bees should be fed honey or sugar syrup, as also should they be fed when foundation is used, and remove them to a place one or two miles distant, where let them remain until the whole yard is cleansed, when they may be returned to their original stands in the old yard. While the bees are starving, scald the hives and frames from which the affected colonies have been taken; extract the honey from the combs, which may be boiled and fed back to them again; render the combs into wax; and the wax, manufacture into foundation, and place it in the scalded frames, for use in the scalded hive, into which put the bees, after their allotted time of starving has expired.

Great caution should be exercised to see that the queen is placed in the hive or box in which the bees are to starve, unless in the case where the colony has been queenless some days previous, when they will do almost as well without one.

Now, in the second case, where one desires to save the brood, proceed as in the former instance, with the smoking and drumming and transferring of the bees and queen to the hive or box for starvation, only sufficient being left in the diseased hive to nurse the brood.

With those placed in the clean hive or box, the operations will be the same as heretofore described. The remaining brood and bees, if weak, should then be doubled up and otherwise strengthened as much as possible; and when hatched out, put through the same process as the others. This method, if properly carried out, will invariably prove successful. It was my intention to have referred to the various causes of the disease; but I find that my paper is already sufficiently lengthy. I will therefore defer it at this time. Before closing, I may say that, by referring to page 103 of the *AMERICAN BEE JOURNAL* for 1882, in its issue of Feb. 15, some further explanations may be found regarding this method of curing foul brood by starvation.

The Western Michigan Bee-Keepers' Association will meet at Supervisors' Hall, in the city of Grand Rapids, on Wednesday and Thursday, Nov. 29th and 30th, 1882. The co-operation of all bee-keepers of this section is desired.

W. M. M. S. DODGE, Sec.

The 17th annual convention of the Michigan State Bee-Keepers' Association will be held in Kalamazoo, Dec. 6 and 7, 1882. All interested are cordially invited to participate in the discussions—which will embrace the live issues of the Apiculture of to-day. Thomas G. Newman, A. I. Root, D. A. Jones, Prof. A. J. Cook, and many other distinguished apiculturists are expected to be present. Low rates of board at hotels have been secured.

T. F. BINGHAM, Sec., Abronia, Mich.

The annual meeting of the Mahoning Valley Bee-keepers' Association will be held at Berlin Center, Mahoning Co., O., in the town hall on Friday and Saturday the 19th and 20th of January, 1883. All bee-keepers are invited to attend and send essays, papers, implements, or any thing of interest to the fraternity. A full attendance is requested of all who are interested. In fact, the meetings will be so interesting that you cannot afford to miss them. We expect a lecturer from abroad on the evening of the 19th. L. CARSON, Pres.

The Nebraska State Bee-Keepers' Association, will hold its annual session in Wahoo, Saunders county, Neb., commencing Thursday, Jan. 11th, 1883. Arrangements have been made with the railroads to secure $1\frac{1}{4}$ fare for the round trip. The Saunders county Bee-Keepers' Association will furnish entertainment free to all visiting apiarists. Bee-keepers from neighboring States will be welcomed.

T. L. VONDORN, Pres.
GEO. M. HAWLEY, Sec.

SELECTIONS FROM OUR LETTER BOX

Report for 1882.—Basswood is very scarce in our neighborhood, and there are no other blooming trees, except fruit trees. White clover was a fair crop here this season. Therefore, I am obliged to resort to planting to make the business a profitable one. I sowed sweet clover in the spring, on sandy soil; it came up very nice, but did not bloom. I also sowed about three acres this fall with wheat, and will resow the same ground again in the spring, as the first time it was sowed thin with that intention; there being so many different reports about sweet clover during the last year, as to the time of sowing and its value afterward; that every man must do his own experimenting in the best way he can. There will be one consolation, I will have the pleasure of knowing some of its traits when it once comes to perfection. Last year I was told to sow catnip, and motherwort in the fall; I did so and failed, now I shall sow in the spring; should I fail on these three plants then there will be a small apiary for sale; should I meet with success, and learn more properly the ways of success of the

apiary, I may hereafter be able to give a more satisfactory report upon apiculture. I started the season with 3 colonies, increased to 12 by natural swarming and returned 4 swarms; I used foundation in the brood chamber and surplus boxes. I obtained 201 lbs. comb honey; average, 67 lbs. spring count. The honey sold at 20 cts. per pound. \$13.40 per colony.

Elida, O. JNO. G. RIDENOUR.

A Natural Bee Hive.—MR. EDITOR:—I send you a sample bee hive, with the side cut away, showing the inside arrangement. It maybe that you can see progression in it.

W. H. BUSSEY.
Chicago, Ill., Nov. 20, 1882.

[It is a hornet-bee's nest, and we suppose was intended to call attention to the 7 dead-air spaces between the inside and outside of the nest, which Nature must have taught these insects to have in order to resist the cold in autumn, and protect the brood, during the fall. There is some difference, however, between their thin paper hives and the board and straw, used for bees in winter, as also much difference between the cold weather during autumn and that of the winter from January to March. We have no doubt, however, that dead-air spaces are as good as any other method of winter protection.—ED.]

4,000 lbs. of Honey from 19 Colonies.—My report is as follows: Extracted honey, 3,000 lbs.; comb honey in one-pound sections, 1,000 lbs. I have also 100 full Langstroth and American frames extra for spring feeding, if next spring should be late. I increased to 71 from 16, spring count. All this increase has come from 11 colonies and their increase, as I have 8 colonies in American Long-Idea hives containing 16 full-size frames and 16 half-frames that did not swarm this season. I increased by natural swarming, giving old colonies an old hive and a laying queen as long as I could keep up with them. I have returned 32 swarms, and 3 went to the woods. Honey-flow was almost continuous from June 4, to Sept. 23, and since that another short flow of about a week, so that the lower stories of many of the hives are honey-bound.

S. H. MOSS.
Colchester, Ill., Oct. 23, 1882.

Ready for Winter.—To-day I have finished my packing my bees for winter. I have packed them in a clamp, similar to the one described by D. A. Jones, except where he says "set the hives about six inches apart," etc. I have put mine one against another, and I leave the propolized cloths on my hives. They have been prepared for winter for some three weeks and the cloths were well stuck fast. I use no packing except buckwheat chaff, which has never failed, even when other material did. In answer to Miss

H. F. Buller in the *BEE JOURNAL* for Nov. 8, where she asks whether I close the upper fly holes when I raise the lower hive, I will say that I always close all but those at the bottom. In place of extracting, if I have the combs, etc., and honey is plenty, I put a third hive on, by parting the two and putting the third between the first two, or I extract from the lower hive at any time, setting the upper one on the stand while extracting the lower. There is no brood below, unless the colony has a very prolific queen.

W. S. BAIR.
Rollersville, O., Nov. 15, 1882.

Care of Empty Combs.—Will it injure empty combs to be left in a hive, without bees, out-of-doors, all the time?

JOHN RUDD.
London, Ont., Nov. 13, 1882.

[There need be no fear of worms for they cannot develop except in warm weather. Spread the combs 2 inches or more apart and they will be safe.—ED.]

My Season's Work.—I had 3 colonies of bees last spring, and last summer obtained six natural swarms. I hived them all on empty extracted combs. I made two of them into two-story hives for extracting, and I extracted 200 pounds of excellent honey from the two. From the other 7 colonies I obtained 200 pounds of comb honey, and they have plenty of honey for winter. I sold the honey at 10 cents a pound for the extracted and 15 cents for the comb honey. I sold all my honey at home at the above price.

WM. ROBERTS.
Vaughansville, O., Nov. 22, 1882.

Sensible Bees?—I have packed 135 colonies of bees; all strong but about 6, which are a little weak in numbers. If they do not go to rearing young bees this warm weather I think they will winter well. Nothing makes me dislike men or bees so much as to see them try to do what they cannot or ought not to do.

E. B. SOUTHWICK.
Mendon, Mich., Nov. 22, 1882.

Wintering Bees.—I will give my experience during the season of 1880-1 and 1881-2; which were the two extremes of temperature during the past 26 years. In 1880-1 I took charge of the Omaha apiary, consisting of 107 colonies, which had been packed during the month of October, 1880, in chaff, thus: they were put on 5 frames, with division boards on each side and the spaces filled with dry chaff; a box 4 inches deep, with mustin bottom, filled with chaff, was put over the frames; then the hives were covered with slough grass. In January the snow filled the apiary so full that I could scarcely see the location of the hives; then came a rain causing the snow to melt, for about 2 days in the beginning of February; after which, it all froze into one solid mass. In March, when it was warm enough for the bees to fly, they knew nothing of the outside world, for they were com-

pletely closed in; the larger portion had to be released by chopping them out. After shoveling out the snow from 18 to 24 inches, I found from 4 to 6 inches of solid ice at the entrance and had to use a small chisel in cutting it out, so that the bees could have their first flight, March 23. Out of 107 colonies 98 came through all right, with plenty of young bees. Now, will some apiarist tell me what saved these bees through that hard winter when 75 per cent. of the bees in the country perished?

G. ROUSE.

Wahoo, Neb., Nov. 20, 1882.

Cause of Foul Brood.—Will some one through the Weekly BEE JOURNAL inform me of the cause of foul brood? I have looked for it under that heading, in Cook's Manual, but could not get a description of it. I am only young in the business and would like to get all the information possible. I like Cook's Manual very much. I bought my bees, which are blacks, last year, and I am not at all satisfied with them. I shall Italianize them next spring. How early would it be advisable to do so? How do you tell foul brood from chilled brood? When I packed my bees for winter I noticed on some of the outside frames a few cells capped over; they were not together, and the rest of the frames were empty. On uncapping some of the cells they contained a dark substance which I took for chilled brood, but I would like to be sure about it. There is an unpleasant smell from it, but not very bad. We are having a very fine fall, this year; the season is something like the spring, one month late.

W. H. WESTON.

London, Ontario, Nov. 23, 1882.

[Our correspondent is referred to the article by Mr. D. A. Jones in this issue of the BEE JOURNAL, on foul brood, for the information he desires. Mr. Muth and Mr. Kohnke have published pamphlets on the subject, which it may be well to read and compare. Transferring should be done as early in the spring as the weather will permit, and before there is much honey in the hive.—ED.]

My Bee Report.—As my bees are now all in winter quarters I will give to the readers of the BEE JOURNAL an account of my season's work. I commenced the last season with 10 colonies of bees, 5 of which were weak. By following the advice of Mr. Doolittle I have increased them to 40 strong colonies, and 6 nuclei consisting of from 4 to 7 frames each, making 46 in all, to winter. I obtained from 800 to 1,000 pounds of honey—one-half each comb and extracted. I have 20 colonies packed on the summer stands, in flax-straw; the rest are in my cellar under the kitchen, 10x14 feet, partitioned off from the main cellar and ventilated, so that I can keep the bees in such temperature as I may desire. I have one colony with 2 queens, which have resided there in harmony for 2 months, and both were alive when put

into winter quarters. I cut one wing of a queen last spring, and she was superseded, but as Mr. Doolittle says it does no harm to them, to clip their wings, I will try again.

J. A. WICHERTS.
Matteson, Ill., Nov. 20, 1882.

Questions.—Is a square hive better to winter in than a long one? In other words, is the Langstroth hive as good to winter in as any other? Mr. Manum's hive you call "a modified Langstroth." The brood-box holds 12 frames $9\frac{1}{2}$ x 12 inches. I mean, more particularly, for out of door wintering. Mr. Manum admits that it costs more to make his chaff hives than it would to build a house, or put them in the cellar, and now the question is, are bees better wintered out of doors? I have been told they do not dwindle so much in spring, wintered on their summer stands. Are they better in other respects? If so, it will pay to build chaff hives. Mr. M. has 500 colonies. What do you think of the "Given Press" as compared to other machines?

A. P. FLETCHER.

Ludlow, Vt., Nov. 12, 1882.

[If for out-door winter alone we should prefer a square frame—but for all purposes we prefer the Langstroth hive and frame. As to the manner of wintering bees there is a diversity of opinion, and as yet the point is unsettled. We have not yet concluded to give any decision on the chaff hive. Wait until next spring and then we may be able to decide more intelligently. Some like the "Given Press" and some do not. Mr. Heddon thinks it as good or better than others.—ED.]

A Humbug or Swindler, which?—About the 1st of March, 1882, I sent \$5 to J. J. Ritchie, of 142 Linn St., Cincinnati, Ohio, for the purchase of a Mitchell honey extractor. I waited until April for the extractor to come, then I wrote him a postal card, and told him to send it soon, etc. To this I got no answer; then I wrote a letter and said, that the extractor must come or else the money, or I would expose him. This he answered, as follows: "Cincinnati, May 1st, 1882. Dear Sir: Your favor of 27th April at hand; your register was received, but no postal card. Your order was sent to our factory at Indianapolis, and I supposed your order was filled. Will see what the matter is and have your extractor sent.—J. J. RITCHIE." I have never heard any more from J. J. Ritchie or the \$5 either. I got tired of waiting for it, so I enclosed \$7 to a well-known supply dealer, and I received an extractor in due time, in prime condition. It pays to deal with an honest man. JOHN F. SELLERS.
Hamlet, Ill., Nov. 16, 1882.

Report for the Past Season.—I had 29 colonies in the spring, and have increased to 40. I have obtained 958 lbs. comb honey and 158 lbs. of extracted.

F. H. SEARES.
Girard, Pa., Nov. 17, 1882.

Honey and Beeswax Market.

OFFICE OF AMERICAN BEE JOURNAL,
Monday, 10 a. m., November 27, 1882.

The following are the latest quotations for honey and beeswax received up to this hour:

Quotations of Cash Buyers.

CHICAGO.

HONEY.—The supply of extracted honey is fully up to the demand. My quotations are: 6 $\frac{1}{2}$ c. for dark and 8 $\frac{1}{2}$ c. for light, delivered here.

BEESWAX.—It is quite scarce. I am paying 27c. for good yellow wax, on arrival; dark and oil colors, 17c@22c.

AL H. NEWMAN, 923 W. Madison St.

CINCINNATI.

HONEY.—Demand is good for extracted honey by the barrel for manufacturing purposes and for table use. The demand is very good for honey in 1@2 lb. jars. A good deal of comb honey could be sold if we had a good article at a rate within the views of the consumer; 4, e., which could be sold at 20c. in the jobbing way and 25c. at retail.

We quote 7@10c. for extracted, and 16@20c. for good comb honey in sections.

BEESWAX.—Is in good demand at 20@27c. per lb. on arrival.

CHAS. F. MUTH.

Quotations of Commission Merchants.

CHICAGO.

HONEY.—The demand for comb honey does not keep pace with the receipts. There is a large surplus on this market at present, and prices are from 2 to 3c. lower than last month.

We quote: white comb honey, in 1@2 lb. sections, 17c@18c. Dark comb honey, hardly any demand. It is held at 12c@15c. Extracted—White brings from 9@10c.; dark, 8@9c.; kegs, half-barrels and casks bring about same price.

BEESWAX.—Choice Yellow, 30c.; dark to medium, 18@25c.

R. A. BURNETT, 161 South Water St.

SAN FRANCISCO.

HONEY.—A sailing vessel this week took 1,018 cases for Liverpool from a packing house. The market is quiet. Such qualities as are in good supply, dark and medium, are in poor demand.

White comb, 18@20c; dark to good, 12@15c; extracted, choice to extra white, 9@10c.; dark and candied, 7 $\frac{1}{2}$ @8c.

BEESWAX.—We quote 25@28c.

STEARNS & SMITH, 423 Front Street.

ST. LOUIS.

HONEY.—Was in better demand and sales were freer; prices steady. Comb sold at 16@18c. in lots; extracted at 8@9c. in barrels; strained, 6 $\frac{1}{2}$ @7c.; choice, in small lots or fancy packages, brings more.

BEESWAX.—Prime bright steady at 26@27c.

R. C. GREER & CO., 117 N. Main Street.

CLEVELAND.

HONEY.—There has been no change in honey the past week. No. 1 white, in 1 lb. sections, continues in good demand at 21@22c. per pound, No. 1 in 2 lb. sections, is also in good request at 19@20c. Second grade, less active, at 1@2 cents $\frac{1}{2}$ lb. less. Extracted, in all shapes, was dull and very little sale. Some Louisiana honey, rather dark, in barrels, was sold at 9c.

BEESWAX.—Prime quality, 25@28c.

A. C. KENDEL, 115 Ontario Street.

NEW YORK.

HONEY.—There is a continued fair inquiry for prime lots of honey, and prices held steadily. Extracted honey quiet and unchanged.

We quote: White clover, fancy, small boxes, 22@25c.; white clover, fair to good, 18@22c.; buckwheat, 16c.; extracted clover, 10@13c.; extracted buckwheat, 9@10c.

BEESWAX.—There is only a moderate movement of wax, but prime lots are held about steady.

Western, pure, 29@30c; Southern, pure, 30@31c.

D. W. QUINBY, 105 Park Place.

BOSTON.

HONEY.—Our market is fairly active. We quote: $\frac{1}{2}$ lb. sections at 30c.; 1 lb. sections, 22@25c.; 2 lb. sections, 20@22c. Extracted, 10c. per lb. Good lots of extracted are wanted in kegs or barrels.

BEESWAX—30c.

CROCKER & BLAKE, 57 Chatham Street.

New subscribers for the Weekly BEE JOURNAL for 1883, can obtain all the rest of the numbers for this year by sending \$2 to this office.

ADVERTISING RATES.

20c. per agate line of space, each insertion.

A line of Agate type will contain about **eight words**; fourteen lines will occupy 1 inch of space. Transient Advertisements payable in advance. Special Notices, 50 cents per line.

DISCOUNTS will be given on advertisements published **WEEKLY** as follows, if the whole is paid in advance:

For 4 weeks.....	10 per cent. discount
8 "	20 "
" 13 " (3 months).....	30 "
" 26 " (6 months).....	40 "
" 39 " (9 months).....	50 "
" 52 " (1 year).....	60 "

Discount, for 1 year, in the **MONTHLY** alone, **25 per cent.**—**6 months, 10 per cent.**—**3 months, 5 per cent.**—if wholly paid in advance.

Discount, for 1 year, in the **SEMI-MONTHLY** alone, **40 per cent.**—**6 months, 20 per cent.**—**3 months, 10 per cent.**—if wholly paid in advance.

Advertisements withdrawn before the expiration of the contract, will be charged the full rate for the time the advertisement is inserted.

THOMAS G. NEWMAN,

925 West Madison Street, Chicago, Ill.

Special Notices.

☞ A few of our subscribers are in arrears for the present year—having requested us to continue, and they would pay soon. Will all such please take this as a request to send on the two dollars with a renewal for next year, if possible.

☞ The Amerian Express Company money order system is the cheapest, safest and most convenient way of remitting small sums of money. Their rates for \$1 to \$5 are 5 cents; over \$5 to \$10, 8 cents. They can be purchased at any point where the company have an office, except Canada, and can be made payable at any one of the company's 4,000 offices.

For safety, when sending money to this office get either a post office or express money order, a bank draft on New York or Chicago, or register the letter. Postage stamps of any kind may be sent for amounts less than one dollar. Local checks are subject to a discount of 25 cents at Chicago banks.

Preparation of Honey for the Market, including the production and care of both comb and extracted honey, instructions on the exhibition of bees and honey at Fairs, etc. This is a new 10 cent pamphlet, of 32 pages.

New Premiums for 1883.

As the season for reading has now arrived, we hope that each of our subscribers will endeavor to send at least one new subscriber for the **Weekly BEE JOURNAL** for 1883 and thus not only help on the cause of progressive bee-culture, but assist in sustaining the only **Weekly bee paper** in the world.

Providence has smiled on the bee-keepers during the past season, and as a general thing they are abundantly able to procure a good assortment of bee-literature.

In order to encourage every one who keeps bees, be they few or many colonies, to thoroughly read the many very interesting books on bee-culture, now published, we have determined to make liberal offers, which will be available until January 1, 1883, as follows:

To any one sending us \$8 for any books they may select from our "Book List," on the last page of this paper, we will present the **Weekly BEE JOURNAL** for one year.

To any one purchasing \$4 worth of books, selected from our "Book List," on the last page of this paper, we will present the **Weekly BEE JOURNAL** for six months or the **Monthly** for one year.

Any one sending us a club of **two** subscribers for 1883, for the **Weekly**, with \$4, will be entitled to a copy of **Bees and Honey**, in cloth, postpaid.

For **three** subscribers, with \$6, we will send Cook's Manual, in paper, Emerson's Binder for the **Weekly**, or **Apiary Register** for 50 colonies.

For **four** subscribers, with \$8, we will send Cook's Manual in cloth, or **Apiary Register** for 100 colonies.

For **five** subscribers, with \$10, we will send the **Apiary Register** for 200 colonies, Quinby's **New Bee-Keeping**, Root's **A B C of Bee Culture**, or an extra copy of the **Weekly BEE JOURNAL** for one year.

To get any of the above premiums for the **Monthly BEE JOURNAL** send double the number of subscribers, and the same amount of money.

☞ We will send Cook's Manual in cloth, or an **Apiary Register** for 100 colonies, and **Weekly BEE JOURNAL** for one year, for \$3.00; or with King's **Text-Book**, in cloth, for \$2.75; or with **Bees and Honey**, in cloth, \$2.50. The **Monthly BEE JOURNAL** and either of the above for one dollar less.

The Monthly Bee Journal for 1883.

At the request of many who have heretofore taken the **Monthly** and **Semi-Monthly BEE JOURNAL**, we shall next year print a **Monthly** consisting of 32 pages, issuing it about the middle of each month, at \$1.00 a year, in advance; 2 copies for \$1.80; 3 copies for \$2.50; 5 copies for \$4.00; 10 or more copies at 75 cents each. An extra copy to the person getting up a club of 5 or more.

The **Weekly** is now permanently established, and will be continued as heretofore.

The **Weekly** and **Monthly BEE JOURNALS** will be distinct papers, each having its own sphere of operation and different readers.

We shall aim to make the **Monthly BEE JOURNAL** a welcome and profitable visitor to the homes of those who feel the need of a cheap, first class, reliable bee paper in pamphlet form—whose time is too much occupied to read a weekly, or whose means or requirements are more limited, and who can dispense with the routine matter more properly belonging to a weekly.

Emerson Binders—made especially for the **BEE JOURNAL**, are lettered in gold on the back, and make a very convenient way of preserving the **BEE JOURNAL** as fast as received. They will be sent, post-paid, for 75 cents, for the **Weekly**; or for the **Monthly**, 50 cents. They cannot be sent by mail to Canada.

☞ The **BEE JOURNAL** is mailed at the Chicago post office every Tuesday, and any irregularity in its arrival is due to the postal employees, or some cause beyond our control.

☞ Articles for publication must be written on a separate piece of paper from items of business.

Sample Copies of the **AMERICAN BEE JOURNAL** will be sent *free* to any person. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office.

Ribbon Badges, for bee-keepers, on which are printed a large bee in gold, we send for 10 cts. each, or \$8 per 100.

☞ Do not let your numbers of the **BEE JOURNAL** for 1881 be lost. The best way to preserve them is to procure a binder and put them in. They are very valuable for reference.

The Apiary Register.

All who intend to be systematic in their work in the apiary, should get a copy and commence to use it.

For 50 colonies (120 pages).....\$1.00
" 100 colonies (220 pages)..... 1.50
" 200 colonies (420 pages)..... 2.00

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable ones.

Subscription Credits.—After sending subscriptions to this office, we would respectfully ask every one to look at the label on the wrapper of the next two papers, and there they will find the credit indicated thus: Those who have paid for the first six months of next year will find "June 83" after their names. Those who have paid for the whole year will find "Dec. 83" on their papers. The credit runs to the *end* of the month indicated. If the mark is "Dec. 82," it means that the subscription is paid until the end of the present year. Please remember that the credit given on this label is a sufficient notification of subscriptions due and receipt for payments made. If not so indicated within two weeks after sending money to us, you may be sure something is wrong, and should write to us about it. It will save annoyance and trouble if our subscribers will give this matter due attention.

Bee Pasturage a Necessity.—We have just issued a new pamphlet giving our views on this important subject, with suggestions what to plant, and when and how. It is illustrated with 26 engravings, and will be sent postpaid to any address for 10 cents.

Our new location, No. 925 West Madison St., is only a few doors from the new branch postoffice. We have a telephone and any one in the city wishing to talk to us through it will please call for No. 7087—that being our telephone number.

Examine the Date following your name on the wrapper label of this paper; it indicates the end of the month to which you have paid your subscription on the BEE JOURNAL.

Postage stamps, of one, two or three cent denomination, accepted for fractional parts of a dollar; but money is preferred.

Honey as Food and Medicine.

A new edition, revised and enlarged, the new pages being devoted to new Recipes for Honey Medicines, all kinds of cooking in which honey is used, and healthful and pleasant beverages.

We have put the price of them low to encourage bee-keepers to scatter them far and wide. Single copy 6 cents, postpaid; per dozen, 50 cents; per hundred, \$4.00. On orders of 100 or more, we print, if desired, on the cover-page, "Presented by," etc., (giving the name and address of the bee-keeper who scatters them). This alone will pay him for all his trouble and expense—enabling him to dispose of his honey at home, at a good profit.

The time for the usual winter rush of correspondence is here, and we wish to impress upon all our patrons the necessity of being very specific, and carefully to state what they desire for the money sent. Also, if they live near one post office, and get their mail at another, be sure to give us the address that we already have on our books.

CLUBBING LIST.

We supply the **American Bee Journal** and any of the following periodicals, one year, at the prices quoted in the last column of figures. The first column gives the regular price of both. All postage is prepaid by the publishers.

Publishers' Price. Club
The Weekly Bee Journal,.....\$2.00.
and Gleanings in Bee-Culture (A.I.Root) 3.00. 2.75
Bee-Keepers' Magazine (A.J.King) 3.00. 2.60
Bee-Keepers' Exch'ng (Houk & Peet) 3.00. 2.90
Bee-Keepers' Guide (A.G.Hill)..... 2.50. 2.35
Kansas Bee-keeper..... 2.60. 2.40
The 6 above-named papers..... 6.00. 5.50

The Weekly Bee Journal one year and Prof. Cook's Manual (bound in cloth) 3.25. 3.00
Bees and Honey, (T. G. Newman) " 2.75. 2.50
Binder for Weekly, 1881..... 2.85. 2.75
Binder for Weekly for 1882..... 2.75. 2.50

The Monthly Bee Journal and any of the above, \$1 less than the figures in the last column.

We want a copy of No. 41 of the BEE JOURNAL for Oct. 11, 1882. If any one has that copy to spare and will risk sending us a postal card saying so, we will take the first offered and give in exchange any 25 cent pamphlet selected from our Book List.

We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails we will cheerfully send another, if notified before all the edition is exhausted.

The result of the election has proved a grand success, but not more so than Kendall's Spavin Cure is proved to be every day. 48w4t

Advertisements.

THE AMERICAN BEE JOURNAL is the oldest Bee Paper in America, and has a large circulation in every State, Territory and Province, among farmers, mechanics, professional and business men, and is, therefore, the best advertising medium.

"BEE-KEEPERS' HANDY BOOK."

22 Years Experience in Rearing Queen Bees.

A book written and published by

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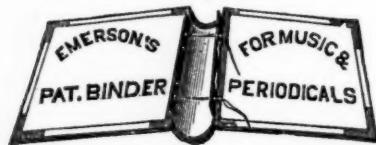
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